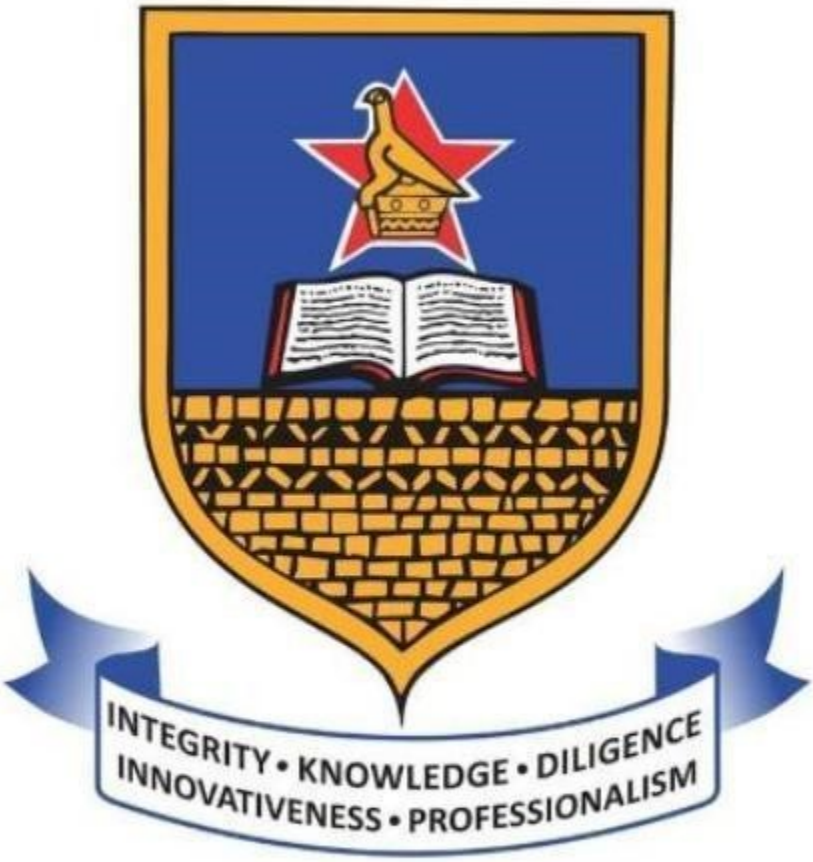

UNIVERSITY OF ZIMBABWE

IDSC GROUP ASSIGNMENT

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Assignment Question: With a special reference to area of study (Geographic Information Science and Earth Observation) investigate current research trends pertaining to digital access and digital divide between rural and urban areas in Zimbabwe. Write a structured and organized literature review (between 700 and 1000 words) with at least 10 different sources and demonstrate how their input contributes to the issues you are investigating.

The digital divide between rural and urban areas using GIS (Geographic information science) in Zimbabwe has been a focus of research in recent years.), digital access is the ability to reach to others and access information in different formats using technology while digital divide refers to the gap between regions or places with modern information technologies to those that do no have like rural areas of Zimbawe. There are a few key areas of current research that focus on bridging the digital divide between rural and urban areas in Zimbabwe.

Using Geographic Information Science in these research trends has helped in identifying areas of extreme digital need in rural areas by providing location information and estimating geographical problems that may be encountered during the research. One area is the development of community based networks, which are networks that are built, owned and operated by local communities. There is a research project that is working to bridge the digital divide in Zimbabwe is the “Internet for all” project, which is being led by the African Network Information Centre (AFriNIC). The project is working to build a network of community-owned wireless mesh networks, which will provide broadband access to rural areas that are currently underserved. The project is also working to develop digital literacy programs, and to provide training and support for local entrepreneurs and businesses.

The goal is to create a sustainable and scalable model that can be replicated in other rural areas in Africa and also around the world. Also by using Geographic Information Science the research trend of using satellite imagery to provide data for rural areas. For example, the company Planet Labs is using a fleet of small satellites to provide high resolution images of the Earth's surface, which can be used to monitor changes in the environment and infrastructure. This information can be used to inform decision making in rural areas, for example, by monitoring crop health and tracking the spread of diseases. Other companies, such as Digital Globe and Esri, are using satellite imagery to provide data for decision making and planning in rural areas.

Another interesting research project is the "Zimbabwe digital inclusion initiative" (ZDI), which is collaboration between the United Nations Development Programme and The Government of Zimbabwe. Using GIS through remote sensing it has developed technologies to map areas and indicate areas in need of digital access especially rural areas. The project is using a variety of approaches, including the establishment of digital hubs, the provision of training and support in rural areas as well as the promotion of digital skills in the development of rural areas as done in urban areas. The initiative is also working to create an enabling environment for digital inclusion, by including the developing policies and regulations that promote access and use of digital technologies.

According to Tawanda (Musarurwa, 5 january 2020)spatial analysis show that Zimbabwe is one the Sub-Sahara African region with rural communal areas that tend to be lagging behind in the adoption of new technologies and slowing down national economic development. Due to increased knowledge in information and communication technologies the government has carried out certain survey to locate areas lagging behind through Postal and Telecommunication Regulatory Authority of Zimbabwe(Potraz). The board in partnership with the government has built digital hubs in rural areas

commonly known as Community Information Centres (CIVs) inorder to foster innovation and the development of new businesses. His main being focusing on what the government has done in trying to curb the issue of digital divide although there are constraints such as barrier to broadband adoption include high cost of serving rural areas.

Using surveys the government has engaged with UNICEF in aiding rural areas with provision of computers to schools. The main agenda of UNICEF is to push green the use of ICT in remote areas of Zimbabwe. It helped communities by providing computers and internet facilities that enabled communities to explore new opportunities like new knowledge, computer literacy and growth of digital economy. (Mupfumira, 19 December 2022)

As conclusion the study which we investigated came out successful as government and other non-governmental organization played a key role in trying to digitize the remote areas of Zimbabwe. Potraz had its own conclusion the issue of digital divide by adding knowledge in the use of ICT is now a basic need and an essential skill for productivity.

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